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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,052	12/15/2003	Adrian P. Stephens	884 B49US1	4028
21186 7590 06/03/2008 SCHWEGMAN, LUNDBERG & WOESSNER, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402				
EXAMINER				
QURESHI, AFSAR M				
ART UNIT		PAPER NUMBER		
2616				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/736,052

Applicant(s)

STEPHENS, ADRIAN P.

Examiner

AFSAR M. QURESHI

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-11 and 13-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-11,13-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Amendment

1. This Office Action is responsive to amendment/Arguments/Remarks received on 3/26/2008.

Amendments to claims entered as requested. Claims 3 and 12 are cancelled.
Claims 1, 2, 4-11 and 13-22 remain pending in the application.

Response to Arguments

2. Applicant's arguments filed 3/26/2008 have been fully considered but they are not persuasive.

Applicant argued:

Prior art reference, Poon, does not disclose the features of, "***determining whether a state capable of interpreting a selected data type has been maintained by a receiver***" and , "***sending the selected data type with the self-definition information to the receiver if the status capable of interpreting the selected data type has not been maintained by the receiver***".

Examiner, respectfully, disagrees. In light of the definition provided in the Disclosure 'self definition' information include code/rate type, power beam forming parameters, modulation etc., As cited in the rejection of the claim 1, universal modem on the transmitter side detects modulation type (self definition information) or format, maintained by the receiver, by detecting the channel to which the receiver is tuned. The

universal modem is then reconfigured to the expected format of signal on that channel [0013]. The receiver side host processor enter the state where it determines the modulation format loaded into the header via channel select 73 [0038] and [0045] at the transmitter [0014] and then reconfigures the demodulation accordingly, Therefore maintaining state capable of interpreting a selected data type.

Furthermore, as discussed in the rejection of claim 8, and cited by the Applicant (Specification [0009]), IEEE protocol 802.11, known at the time of invention, also prohibits reception from any other device by the receiver until the training transmitter indicates that a communication session between the training transmitter and the receiver is terminated, which is one of the condition, cited by the Applicant, for receiver to maintain the state capable to interpreting a selected data type. Therefore, one of skill in the art, at the time of invention would have used the 802.11 protocol for ***determining whether a state capable to interpreting a selected data type has been maintained by a receiver.***

Poon further discloses that transmitter side universal modem 204 (fig. 13) is software configurable capable of sending data with or without self definition information, as discussed in the rejection of claims 12-13 (1/31/2008). It would be readily clear to one skilled in the art that Poon's transmitter is capable of ***sending the selected data type with the self-definition information to the receiver if the status capable of interpreting the selected data type has not been maintained by the receiver.***

During examination the pending claims are given their broadest reasonable interpretation consistent with the Specification ... the broadest reasonable interpretation

of the claims must also be consistent with the interpretation that those skilled in the art would reach (MPEP § 2111.01).

Based on above response Examiner maintains the rejection as follows:

3. ***The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.***

4. Claims 1, 2, 4-11, 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP0928084 A2 (MITSUBISHI DENKI KABUSHIKI KAISHA (Inventors: Poon et al.) ('Poon' hereinafter) in view of Kobayashi, US 2004/0218627 A1.

As to claims 1, 2, 11, 15 and 19. Poon discloses transmitter side 200 and receiver side 202 (fig. 12) wherein the receiver detects the modulation type (*selected data type*) of the incoming signal and formats (*training the receiver*) into a state capable of interpreting the selected data type. This is done by a host processor 74 (*access point, see [0038]*) on a priori knowledge of the modulation type (*determining if the receiver maintains a state capable of interpreting the selected data type*) (see col. 3, lines 1-10, col. 5, lines 10-18 and col. 8, lines 9-12). In another embodiment, on the transmission side, a header word is inserted (*self definition information*) where a modulation type flag is used on the transmission which are detected at the receiver side and configures the demodulation logic circuit (*receiver does not maintain a state*

capable of interpreting the selected data type). (col. 3, lines 3035; col. 4, lines 42-47; col. 9, lines 10-20 and col. 11, lines 39-56).

As to claims 4-7. Poon discloses stripping off the header and providing flags in the header (see col. 12, [0061] fig. 12) each modulation type is predetermined between transmitter and receiver so that a receiver can enter the state where it can interpret the selected data type.

As to claim 8. Poon does not specifically disclose utilizing 802.11 protocols. However, 802.11 protocols are known and old (ANSI/IEEE 1999), Examiner takes Official Notice. For example, in 802.11 protocols, once a packet is correctly received by a receiver, it must remain off for an entire frame which causes stations that are outside an intended transmission range (*prohibits communication with a transmitter other than a training transmitter*) to remain idle during frame transmission.

As to claims 9-10, 17, 18, 22. Poon discloses self definition information, such as modulations discussed above, is included in the packet header (see col. 11, [0053]) wherein the data is sent in series of modulated packets.

As to claim 13, Poon discloses utilizing a program or software, in a computer, for sending a selected data with or without self definition information as discussed above (see col. 12, lines 5-12).

As to claims 16, 21. Poon discloses configuration 'RAM 80'(fig. 5A), receive side, that specifies the appropriate demodulation mode to be downloaded (see col. 9, [0038], lines 16-20).

As to claim 20. Poon does not specifically disclose an omnidirectional antenna, however, Poon discloses that the universal modem which is software reconfigurable has an input either a terrestrial signal or a *satellite signal* each with its own unique modulation format (see col. 7, [0031]). One of ordinary skill in the art, at the time of invention would readily realize that the same invention can be modified to receive satellite signals via an antenna (see col. 15, lines [0080]).

As to claim 14. Poon discloses inserting flags in setting up universal modem, these flags are detected at the receiver side that in turn help select the channel to which is receiver is tuned to (training the receiver), however Poon does not specifically disclose training session as claimed herein.

However, Kobayashi discloses performing a training session by sending a training pattern over a link to the receiver (see page 10, [0107]) where a processor controls the release of the training session (see fig. 25, page 9, [0101]).

It would have been obvious to one of ordinary skill in the art, at the time of instant invention, to be able to integrate process for performing training session, taught by Kobayashi to establish a stable link prior to communication between said transmitter and the trained receiver.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AFSAR M. QURESHI whose telephone number is (571)272-3178. The examiner can normally be reached between 9am to 5 pm, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Field Lynn can be reached on (571) 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Afsar M Qureshi/
Primary Examiner
Art Unit 2616

6/1/2008

Application Number**Application/Control No.**

10/736,052

**Applicant(s)/Patent under
Reexamination**

STEPHENS, ADRIAN P.

Examiner

AFSAR M. QURESHI

Art Unit

2616